Deaf Blind Communicator

DBC

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Telesensory TeleBraille

Late 1970's

TeleBraille

- Off-the-shelf TTY with acoustic coupler with LED display and QWERTY keyboard
- braille input keyboard and 20 braille cells for reading
- Standard Baudot communications protocol
- Face-to-face communications
- "Luggable"
- Discontinued in 1997

Other existing TTY Solutions

- Not impractical for portable use outside of the home environment
- External braille displays configured to a standard TTY; not integrated into one single unit
- Braille displays configured with PC's required more training and support (Screen reader, applications, Windows user interface)
- No options for mainstream telecommunications such as internet access, email or text messaging
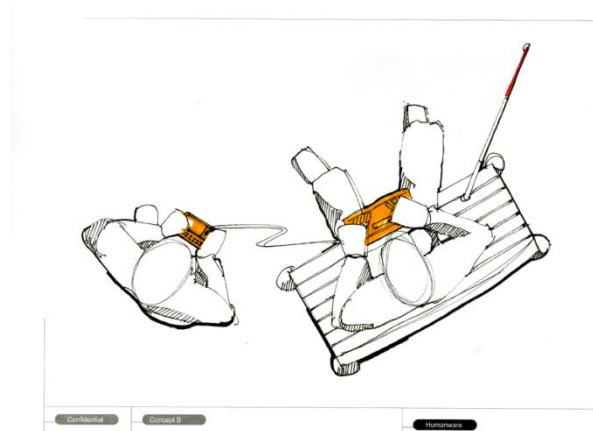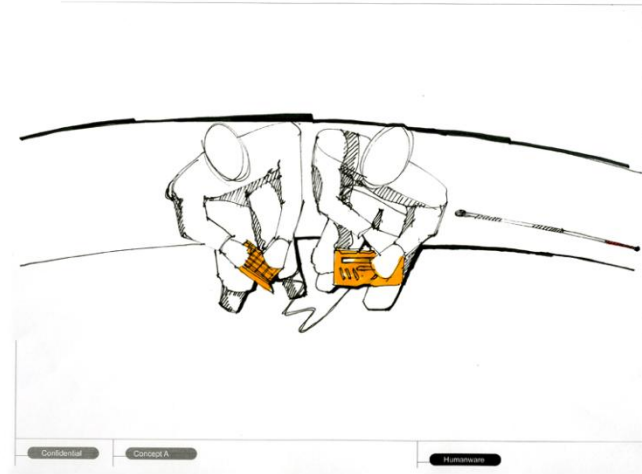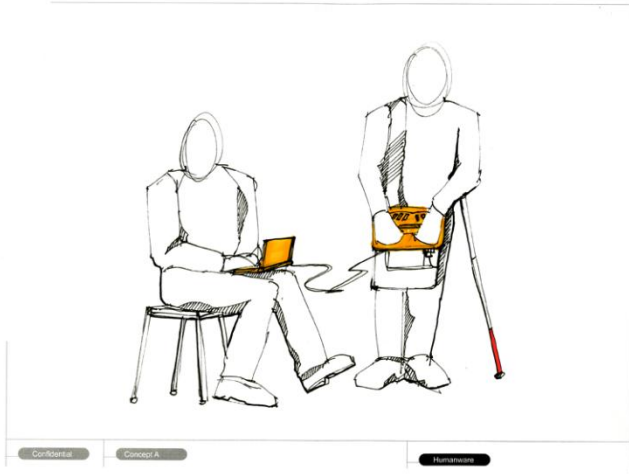
HumanWare awarded Grant 2006

HumanWare worked in partnership with the State of Washington Office of Deaf and Hard of Hearing (ODHH) to develop a modern, technology tool to help facilitate communication between sighted and deaf blind individuals.

HumanWare has over a 20 year history of providing sales, service and support for braille products to the blind community.

HumanWare member of the open braille initiative to standardize all braille drivers.

Considering different Face-to-face Communication scenarios

Humanware™

User groups recommend these essential requirements

- Ensure that the product is entirely portable
- **Build in TTY functionality into one single unit**
- **Provide an answering machine within the same unit**
- **Support existing Baudot communications protocol for the TTY, and add ASCII for greater speed and access to mainstream communications (Internet, Email, Text Messaging)**
- Offer a choice of Braille or QWERTY input keyboards
- For face-to-face communications, ensure that the companion unit to be used by a sighted person is portable and ergonomically feasible in most situations including in a shop or on a bus.
- Easy to learn

BrailleNote – first introduced in 2000 serves as the foundation for the deaf blind user

- has built in refreshable braille display (output)
- portable and battery operated (12+ hours of battery life)
- reliable and proven product in the blindness community
- KeySoft user interface designed with intuitive menu system

BrailleNote Classic 2000

BrailleNote mPower 2005

Four models to offer choice of braille and QWERTY keyboards and choice of 18 or 32 braille cells

braille keyboard 18 cells

braille keyboard 32 cells

QWERTY 18 cells

QWERTY 32 cells

Humanware

Evaluating options for a mainstream face to face companion device to be used by a sighted person

Mobile

Tablet

Palmtop computers

Mini

Focus group chose portability

DB Companion

With a slide-out QWERTY Keyboard

DB Companion Showing Keyboard

![Humanware logo]

DB Companion also serves as an alert

- Start new conversation - two short pulses
- Incoming TTY call - two long pulses
- Incoming SMS message – three long pulses

Keeping it simple with KeySoft

- KeySoft Suite has evolved over the past 25 years
- Simple Menu System
- Non graphical Interface
- Context sensitive help is available for all prompts
- Minimal training required

DBC Basic Menu

- Face to Face
- TTY
- SMS
- Address List

Tapping the 21ˢᵗ Century

- Word processing, spell check, Dictionary / Thesaurus
- Calendar
- Address, contact manger
- **Email**
- **Internet Browser**
- **SMS Texting (Text messaging)**
- **Instant Messaging XMPP (Google Talk / G Chat)**
- **VCO - Voice Carry Over**
- Braille book storage and reading capability
- Optional GPS extension

DBC Advanced Menu

- Main Menu
- Word Processor
- Planner
- Address List
- Email
- Internet
- Chat
- Media Center
- Book Reader
- Scientific Calculator
- DataBase Manager
- Games
- File Manager
- Utilities
- Terminal for Screen Reader
- Remote Synthesizer
- Keyboard Learn
- For information press space with I
- For the options menu place space with o anywhere

DBC BrailleNote BT DBC BrailleNote QT

DBCPhone

Keyboard

TTY

DB Companion is activated from the DBC

DB Companion is secured to DB consumer

DB Companion with retractable tether

Hi, I'm blind and can't hear. To communicate with me, type a message and press ↵

"What can I do for you?"

DBC User reads message on braille display

DBC User types a response in braille

Sighted person reads and responds with Companion

SMS Texting (Text Messaging)

- DBC users can choose to purchase a text messaging plan from a service provider.

  - Note all monthly costs and maintenance associated with the cell phone plan must be borne by the user.

- DB Companion instantly recognizes the SIM card and adds the option to the menu:

  - Note: TTY usage requires a land line and will only work with other land line system. SMS Texting involves cell technology and can only send and receive text messages with other cell phones.

What about Training?

- Easy Getting Started Guide (Print & Braille)
- Regional Training at Deaf Blind Centers (HKNC)
- KeyView for visual display
- PC and Face to Face Communication

![Humanware logo]

DBC Pricing

- DBC 32 Cell $8239

- DBC 18 Cell $6379

- DBC Add on Kit for Existing BrailleNote mPower users $2569

  Includes phone, software, documentation and training material.

- One year Warranty (extended service contract available)

  32 Cell $800, 18 Cell $600, Upgrade $300

www.HumanWare.com

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